



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/824,091

04/14/2004

Kevin C. Matthews

5760-21200

6158

35690 7590 10/03/2006

MEYERTONS, HOOD, KIVLIN, KOWERT & GOETZEL, P.C.  
700 LAVACA, SUITE 800  
AUSTIN, TX 78701

EXAMINER

NGUYEN, CINDY

ART UNIT

PAPER NUMBER

2161

DATE MAILED: 10/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/824,091

Applicant(s)

MATTHEWS ET AL.

Examiner

Cindy Nguyen

Art Unit

2161

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 14 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

This is in response to application filed on 04/14/04 in which claims 31 are presented for examination.

### ***Information Disclosure Statement***

The information disclosure statement filed on 07/08/04 is in compliance with the provisions of 37 CFR 1.97, 1.98 and MPEP § 609. Because it has been placed in the application file, and the information referred to therein has been considered as to the merits.

### ***Claim Objections***

Claims 1, 7, 13, 14 and 20 are objected to because of typographical error "aperiodically"  
-Appropriated correction is required.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1, 7, 13, 14 and 20 recite the limitation "wherein only metadata for static copied data" in claim 17, 13, 14 and 20, respectively. There is insufficient antecedent basis for this limitation in the claim.

Claims 6, 12, recite the limitation "wherein the background processes" in claim 1, 7, respectively. There is insufficient antecedent basis for this limitation in the claim.

Claim 1, at line 1 and line 14, recites pronoun "that" is not permitted in the claim.  
Correction is required.

Claim 7, at line 8 and line 11, recites pronoun "that" is not permitted in the claim.

Correction is required.

Claim 13, at line 5 and line 8, recites pronoun "that" is not permitted in the claim.

Correction is required.

Claim 14, at line 3 and line 7, recites pronoun "that" is not permitted in the claim.

Correction is required.

Claim 20, at line 4 and line 8, recites pronoun "that" is not permitted in the claim.

Correction is required.

### ***Claim Rejections - 35 USC § 101***

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Regarding claims 20-25 and 30-31, a computer-accessible medium carrying one or more sequences of Instructions for executing transactions is recited in the claim "Computer-accessible medium" as defined in the specification (0097) may transmit or carry instructions to a computer, including a transmission media or signals, such as electrical, electromagnetic, or digital signals, conveyed via a communication medium such as network and/or a wireless link. A signal encoded with functional descriptive material does not fall within any of the categories of patentable subject matter. Therefore, claims 30-31 are not statutory (As set forth in § 101, a claimed signal is clearly not a process under § 101 because it is not a series of steps. A claimed signal has no physical structure, does not itself

Art Unit: 2161

perform any useful, concrete and tangible result, and does not fit within the definition of a machine. A claimed signal is not matter, but a form or energy, and therefore is not a composition of matter or product).

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-31 are rejected under 35 U.S.C. 102(e) as being anticipated by Colgrove et al. (US 7103740) (hereafter Colgrove).

Regarding claims 1, 7, 13, 14 and 20, Colgrove discloses: a system, a method and a computer accessible medium comprising:

one or more data storage devices comprising a file system (268, 270, 272, 280, fig 5 ; 382, 380 fig. 9 and corresponding text, Colgrove);

one or more data backup devices (390, fig. 9 and corresponding text, Colgrove); and

a two-tier backup mechanism (350, fig. 9 and corresponding text, Colgrove) configured to:

periodically or aperiodically back up candidate static data (data in read only storage class will be backup) from the file system to second-tier backup media on the data backup devices, wherein the candidate static data are data in the file system that have not been modified for a specified period (as data in read-only (not changeable ) storage class may be periodically backed up in an image based full backup, col. 22, lines 48-59, Colgrove);

periodically or aperiodically back up dynamic data (writeable storage class) and the candidate static data from the file system to first-tier backup media on the data backup devices, wherein the dynamic data are data in the file system that have been created or modified in the specified period (col. 22, line 59 to col. 23, lines 3; col. 24, lines 5-40, Colgrove);

wherein only metadata for static copied data (aged data) is backed up from the file system to the first-tier backup media, wherein the static copied data are static data in the file system for which a specified number of copies have been previously backed up to the second-tier backup media (col. 28, lines 32 to col. 29, lines 15, Colgrove).

In addition, Colgrove disclose: a processor (372, fig. 9 and corresponding text, Colgrove); a memory (374, fig. 9 and corresponding text, Colgrove).

Regarding claims 2,8, 15, 21, all the limitations of this claim have been noted in the rejection of claims 1, 7, 14, 20 above. In addition Colgrove discloses: wherein the file system does not include infrastructure to support Hierarchical Storage Management (HSM) (col. 5, lines 27-43; col. 23, lines 4-11, Colgrove).

Regarding claims 3, 9, 16, 22, 27, 29 and 31 , all the limitations of this claim have been noted in the rejection of claims 1, 7, 14, 20 and 26, 28, 30 above. In addition Colgrove discloses: wherein the file system supports Hierarchical Storage Management (HSM) but HSM is not implemented on the file system (col. 5, lines 27-43; col. 23, lines 4-11, Colgrove).

Regarding claims 4, 10, 17, 23 , all the limitations of this claim have been noted in the rejection of claims 1, 7, 14, 20 above. In addition Colgrove discloses: wherein the file system supports Hierarchical Storage Management (HSM) and HSM is implemented on the file system (col. 5, lines 27-43; col. 23, lines 4-11, Colgrove).

Regarding claims 5,11, 18, 24, all the limitations of this claim have been noted in the rejection of claims 1, 7, 14, 20 above. In addition Colgrove discloses: wherein the two-tier backup mechanism is integrated with Hierarchical Storage Management (HSM) on the file system (col. 5, lines 27-43; col. 23, lines 4 to col. 32, lines 42, Colgrove).

Regarding claims 6, 12, 19, 25, all the limitations of this claim have been noted in the rejection of claims 1, 7, 14, 20 above. In addition Colgrove discloses: further comprising a restore mechanism configured to: restore the dynamic data, the candidate static data, and the metadata for the static copied data from a first-tier backup to the file system (col. 32, lines 44 to col. 33, lines 5, Colgrove);

make the file system operational after said restore from the first-tier backup; and schedule one or more background processes to restore one or more portions of the static copied data from the second-tier backup media to the file system (col. 27, lines 40 to col. 28, lines 25, Colgrove);

wherein the background processes are configured to use the restored metadata for the static copied data to locate the static copied data on the second-tier backup media (col. 28, lines 32-65, Colgrove).

Regarding claims 26, 28 and 30, all the limitations of this claim have been noted in the rejection of claims 1, 7, 14, 20 above. In addition Colgrove discloses: perform a first-tier backup, wherein, in the first-tier backup, the two-tier backup mechanism is configured to, for each file on the file system:

determine if the file is a dynamic file or a static file, wherein dynamic files are files that have been created or modified in the specified period and static files are files that have not been created or modified in the specified period (col. 24, lines 40-60; col. 27, lines 4-17, Colgrove);

if the file is a dynamic file, copy the dynamic file to first-tier backup media (col. 24, lines 40-60, Colgrove);

if the file is a static file, determine if the static file is a candidate static file or a static copied file according to a specified number of copies of the static file on the second-tier backup media (col. 24, lines 40-60; col. 27, lines 4-17, Colgrove);

if the file is a candidate static file, copy the candidate static file to the first-tier backup media (col. 24, lines 40-60; col. 27, lines 4-17, Colgrove); and

if the file is a static copied file, copy only metadata associated with the static copied file to the first-tier backup media (col. 24, lines 40-60; col. 27, lines 4-17, Colgrove).



Art Unit: 2161

***Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cindy Nguyen whose telephone number is 571-272-4025. The examiner can normally be reached on M-F: 8:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gaffin Jeffrey can be reached on 571-272-4146. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9306 for regular communications and 703-872-9306 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

*CN*

Cindy Nguyen  
September 27, 2006

*Frantz Coby*  
**FRANTZ COBY**  
**PRIMARY EXAMINER**